

PTO/SB/21 (05-03)

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Application Number	10/822,586
Filing Date	April 12, 2004
First Named Inventor	EJ Jacobsen
Art Unit	1614
Examiner Name	Not yet available
Attorney Docket Number	01586.US1

Total Number of Pages in This Submission

ENCLOSURES (Check all that apply)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance communication to Group |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment/Reply | <input type="checkbox"/> Petition | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Terminal Disclaimer | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
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| <input type="checkbox"/> Certified Copy of Priority Document(s) | Remarks | |
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| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Mary J. Hosley, (48,324)
Signature	<i>Mary J. Hosley</i>
Date	24 August 2004

CERTIFICATE OF TRANSMISSION/MAILING

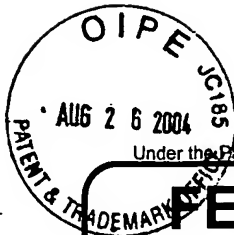
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Typed or printed name	Carolyn S. VanderMolen
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Signature	<i>Carolyn S. VanderMolen</i>	Date	8/24/2004
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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)**180.00**

Complete if Known

Application Number	10/822,586
Filing Date	April 12, 2004
First Named Inventor	EJ Jacobsen
Examiner Name	Not yet available
Art Unit	1614
Attorney Docket No.	01586.US1

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit
Account
Number
Deposit
Account
Name

21-0718

Pharmacia & Upjohn Company

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid
Total Claims	<input type="text"/>	-20** =	<input type="text" value="0"/>	X	<input type="text" value="\$0.00"/>	<input type="text" value="\$0.00"/>
Independent Claims	<input type="text"/>	-3** =	<input type="text" value="0"/>	X	<input type="text" value="\$0.00"/>	<input type="text" value="\$0.00"/>
Multiple Dependent					<input type="text" value="\$0.00"/>	<input type="text" value="\$0.00"/>

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)**0.00**

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	180.00
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**180.00**

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Mary J. Hosley	Registration No. (Attorney/Agent)	48,324	Telephone	(269) 833-0975
Signature	<i>Mary J. Hosley</i>	Date	August 24, 2004		

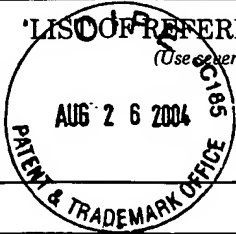
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08/30/2004 WAFSAW1 0000036 210718 10822586

01 FC:1806 180.00 DA

LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i> 				Atty. Docket No. 01586.US1		Serial No. 10/822,586		
				Applicant E J Jacobsen et al.				
				Filing Date 4/12/2004		1614		
U.S. PATENT DOCUMENTS								
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
	AA	6,468,999	October 22, 2002	Jacobsen, et al.	514	215	7/11/2000	
	AB	5,952,349	September 14, 1999	T Asberom, et al.	514	316	7/08/1997	
	AC	5,534,518	July 9, 1996	RN Henrie, II, et al.	514	260	6/28/1994	
	AD	4,938,949	July 3, 1990	Borch et al.	424	10	9/12/1988	
	AE	4,894,358	January 16, 1990	MP Filosa, et al.	503	201	8/31/1988	
	AF	4,332,820	June 1, 1982	LD Markley	424	304	12/29/1980	
	AG	4,298,676	November 3, 1981	DHR Barton, et al.	430	221	10/29/1979	
	AH	4,239,888	December 16, 1980	MW Miller	544	309	11/04/0974	
	AI	4,026,830	May 31, 1977	HD Gillman, et al.	260	2 P	8/18/1975	
	AJ	3,948,987	April 6, 1976	TL Fridinger	260	556 F	4/19/1974	
	AK	3,914,418	October 21, 1975	AA Patchett, et al.	424	230	8/24/1973	
	AL	3,839,357	October 1, 1974	JB Hester, Jr.	260	326.5 B	10/23/1969	
	AM	3,676,558	July 11, 1972	JB Hester, Jr.	424	274	8/28/1970	
	AN	3,652,588	March 28, 1972	JB Hester, Jr.	260	326.3	10/23/1969	
	AO	3,576,872	April 27, 1971	GH Singhal	260	562	5/3/1968	
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AP	WO 99/62506	12/09/1999	WIPO	A61K	31/165		
	AQ	WO 99/44618	09/10/1999	WIPO	A61K	31/63		
	AR	WO 99/32463	07/01/1999	WIPO	C07D	273/00		
	AS	WO 97/13748	04/17/1997	WIPO	C07C	317/36		
	AT	WO 94/18980	09/01/1994	WIPO	A61K	31/55		
	AU	CH 619 46 with English Abstract	09/30/1980	Switzerland	C07D	241/52		X
	AV	DE 198 29 357	01/05/2000	Germany	C07C	319/14		X
	AW	DE 196 54 445	07/02/1998	Germany	A61K	31/135		X
	AX	DE 38 31 445	03/22/1990	Germany	A61K	31/505		X
	AY	DE 30 27 530	02/25/1982	Germany	C07D	501/34		X
	AZ	DE 27 48 978	05/03/1979	Germany	C09B	29/08		X
	BA	DE 27 07 784	08/25/1977	Germany	C07D	495/10		X
	BB	DE 25 48 910	05/12/1977	Germany	C07C	149/42		X
	BC	DE 25 09 037	09/02/1976	Germany	C07D	239/54		X
	BD	DE 24 38 120	02/19/1976	Germany	C07D	235/32		X

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)				Atty. Docket No. 01586.US1		Serial No. 10/822,586				
				Applicant E J Jacobsen et al.						
				Filing Date 4/12/2004		1614				
	BE	DE 24 38 099	02/19/1976	Germany	C07D	285/34		X		
	BF	DE 21 20 708	11/09/1972	Germany	C07C	149/42		X		
	BG	EP 0 930 302	07/21/1999	Europe	C07D	239/38				
	BH	EP 666 253	08/09/1995	Europe	C07C	317/36				
	BI	EP 0 524 781	01/27/1993	Europe	C07D	213/75				
	BJ	EP 0 354 303	02/14/1990	Europe	C07C	317/32				
	BK	EP 0 282 448	09/14/1988	Europe	C07D	231/06		X		
	BL	EP 0 102 476	03/14/1984	Europe	A61K	31/16				
	BM	EP 0 035 712	09/16/1981	Europe	C07C	155/02		X		
	BN	EP 0 028 381	05/13/1981	Europe	C07D	487/04				
	BO	EP 0 017 883	10/29/1980	Europe	C07C	119/042		X		
	BP	EP 0 013 414	07/23/1980	Europe	C07C	127/22		X		
	BQ	FR 2 230 354	12/20/1974	France	C07D	55/50		X		
	BR	FR 2 154 568	05/11/1973	France	C07C	115/00		X		
	BS	FR 6 699M	02/10/1969	France	C07D			X		
	BT	FR 1 489 916	11/15/1967	France	C07C			X		
	BU	FR 1 499 717	11/10/1966	France	C07C			X		
	BV	FR 2 135 740	12/22/1972	France	C07C	149/00		X		
	BW	FR 2 110 283	06/02/1972	France	A61K	27/00		X		
	BX	FR 2 053 028	04/16/1971	France	A61K	27/00		X		
	BY	GB 1293540	10/18/1972	United Kingdom	C07C	43/20				
	BZ	JP 60 044557 English Abstract	03/09/1985	Japan	C09B	29/085		X		
	CA	JP 02 048564 English Abstract	02/19/1980	Japan	C07C	323/09		X		
	CB	XP002150012 English Abstract JP3056431	03/12/1991	Japan						
	CC	XP002150006 English Abstract SU380644	05/15/1973	Russian						
	CD	XP002150004 English Abstract SU475382	06/30/1975	Russian						
	CE	SP002149988 English Abstract ZA6 801 404 1	08/01/1968	South Africa						
	CF	XP002149985 English Abstract CS 149 525 B	07/25/1973	Czech Republic						

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)				Atty. Docket No. 01586.US1		Serial No. 10/822,586		
				Applicant E J Jacobsen et al.				
				Filing Date 4/12/2004		1614		
	CG	XP002149984 English Abstract SU436 817 T	07/25/1974	Russian Federation				
	CH	XP002149982 English Abstract ZA 7 603 751A	02/22/1978	South Africa				
	CI	XP002149980 English Abstract CS 229 033 B	05/14/1984	Czech Republic				
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
	CJ	(abstract) XP-002150015 – J. Med. Chem. (1969), 12, 709-11. Antimalarial compounds related to diaminodiphenyl sulfone; Henry Bader, et al.						
	CK	(abstract) XP-002150014 – Macromolecules (1988), 21(8), 2644-7; A novel route to polypyrazoles; James A. Moore, et al.						
	CL	(abstract) XP-002150013 – Khim. Geterotsik. Soedin. (1991), (1) 54-6; Synthesis of 5-[(p-chlorophenyl) sulfonyl]indoles; N. T. Mirziashvili, et al.						
	CM	(abstract) XP002150011 – J. Chem. Eng. Data (1966), 11(4), 612-14; o-Trifluoromethylthiophenol and its derivatives; N. Sharghi, et al.						
	CN	(abstract) XP-002150010 – Synthesis (1971), (7), 372-4; Aminoaryl sulfones. New preparation procedure; Everett E. Gilbert						
	CO	(abstract) XP-002150009 – J. Med. Chem. (1971), 14(12), 1166-9; Antimalarial agents. 8. Ring-substituted bis(4-aminophenyl) sulfones and their precursors; Ivan C. Popoff, et al.						
	CP	(abstract) XP-002150008 – Zh. Prikl. Khim. (Leningrad) (1972), 45(12), 2704-10, Synthesis of some substituted diphenyl sulfones; I.V. Budnii, et al.						
	CQ	(abstract) XP-00215007 – J. Mol. Struct. (1973), 16(2), 299-306, NMR data and conformational preference of o-substituted diphenyl sulfones; G. Montaudo, et al.						
	CR	(abstract) XP-002150005 – Zh. Khim. 1973; Tr. Vses. Nauch-Issled. Proekt. Inst. Monomerov (1972), 3(3), 75-80; Synthesis of 3,4,4'-triaminodiphenyl sulfones and their use in modifying heat-stable fibers; A.V. Ivanov, et al.						
	CS	(abstract) XP-002150003 – Acta Cienc. Indica (1977), 3(1), 18-19; Fries rearrangement of N-benzenesulfonylaniline; C. Srinivasan.						
	CT	(abstract) XP-002150002 – Khim. Geterotsikl. Soedin (1979), (7) 968-71; Synthesis and study of some bis (1',8'-naphthoylene-1,2-benzimidazoles); A.L. Rusanov, et al.						
	CU	(abstract) XP-00215001 – Katalitich. Prevrashcheniya Organ. Soedin., Perm (1978), 20-5; Sulfarylation of p-substituted benzenesulfonic acid salts with phosphoric acid; A. G. Klein, et al.						
	CV	(abstract) XP-00215000 – Quant. Struct.-Act. Relat. (1987), 6(4), 164-72; Multiple regression analysis of antimalarial activities of sulfones and sulfonamides in cell-free systems and principal components analysis to compare with antibacterial activities; M. Wiese, et al.						
	CW	(abstract) XP-002149999 – J. Med. Chem. (1989), 32(10), 2396-9; Quantitative structure-activity relationships in dihydropteroate synthase inhibition by multisubstituted sulfones. Design and synthesis of some new derivatives with improved potency; G. Pier De Benedetti, et al.						
	CX	(abstract) XP-002149998 – Arzneim.-Forsch. (1989), 39(9), 1081-4; Studies on 2,3,N,N'-substituted 4,4'-diaminodiphenylsulfones as potential antimalarial agents; M. Saxena, et al.						
	CY	(abstract) XP-002149997 – J. Clin. Invest. (1990), 85(2), 371-9; Interaction of sulfonamide and sulfone						

LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>		Atty. Docket No. 01586.US1	Serial No. 10/822,586
		Applicant E J Jacobsen et al.	
		Filing Date 4/12/2004	1614
		compounds with Toxoplasma gondii dihydropteroate synthase; Carmen J. Allegra, et al.	
	CZ	(abstract) XP-002149996 – Theochem (1992), 88, 231-48; Electrostatics in quantitative structure-activity relationship analysis; P.G. De Benedetti.	
	DA	(abstract) XP-002149995 – J. Chem. Soc., Perkin Trans. 1 (1992), (22), 3129-34; 2H-Benzimidazoles (isobenzimidazoles). Brian Iddon, et al.	
	DB	(abstract) XP-002149994 – Boll. Chim. Farm. (1994), 133(2), 72-5; Synthesis and antimicrobial evaluation of new derivatives of diphenylsulfone; A. De La Cruz, et al.	
	DC	(abstract) XP-002149993 – Environ. Toxicol. Pharmacol. (1998), 5(2), 145-153; The effect of 2,2'-substitution on the metabolism and toxicity of dapsone in vitro and in vivo; M.D. Tingle, et al.	
	DE	(abstract) XP-002149992 – Bol. Soc. Chil. Quim. (2000), 45(2), 181-189; Synthesis characterization and electrical properties of poly (p-phenylsulfonyl aniline); Fernando R. Diaz, et al.	
	DF	(abstract) XP-002149991 – Indian J. Appl. Chem. (1966), 29(2-3), 51-3; Potential fungicidal compounds. IV. Some aryl polynitrophenyl sulfones; Satya Prakash Gupta, et al.	
	DG	(abstract) XP-002149990 – J. Chem. Soc. C (1968), (3), 322-7; Photochemical transformations. XXII. Reactions of 2,4-dinitrobenzenesulfenyl derivatives; Derek H. R. Barton, et al.	
	DH	(abstract) XP-002149989 – Zh. Fiz. Khim. (1968), 42(8), 1861-4; Interaction of functional groups through .pi.-electron systems. V. Interaction through aromatic rings connected by a monofunctional bridging group; A. E. Lutsikii, et al.	
	DI	(abstract) XP-002149987 – Ann. Soc. Sci. Bruxelles, Ser. 1 (1969), 83(1), 182-96; New phenothiazines by Smiles rearrangement; R. L. Mital, et al.	
	DJ	(abstract) XP-002149986 – J. Chem. Soc., Perkin Trans. 1 (1973), (18), 1980-3; .sigma.-Complex formation and aromatic substitution with thiolates and nitroaryl thio ethers; Gino Biggi, et al.	
	DK	(abstract) XP-002149983 – J. Org. Chem. (1975), 40(25), 3777-8; Electronic and steric effects in nucleophilic aromatic substitution. Kinetic studies on the reactions between ethers and thioethers of 2,4-dinitrophenol and nucleophiles; G. Bartoli, et al.	
	DL	(abstract) XP-002149981 – Chim. Acta Turc. (1981), 9(2), 395-9; Synthesis and fungitoxicity of some substituted aryl polynitrophenyl sulfides and sulfones; Merra Katiyar, et al.	
	DM	(abstract) XP-002149979 – Khim. Geterotsikl. Soedin. (1968), (1), 131-6; Indole derivatives. XXIV. Synthesis of some 1,2,3,4,5,6-hexahydroazepino[4,5-b]indoles; N. M. Sharkova, et al.	
	DN	(abstract) XP-002149978 – Farmakol. Toksikol (Moscow) (1972), 35(3), 274-80; Pharmacological activity spectra of some azepino-and benzoxepinoindole derivatives; G. N. Artemenko, et al.	
	DO	XP-000650781 – Journal of Medicinal Chemistry, US, American Chemical Society, Washington. Vol. 11, No. 1, (1968), 101-106; Azepinoindoles. I. Hexahydroazepino[4,5-b]indoles; J. B. Hester, et al.	
Examiner		Date Considered	